Pedagogical interventions to support student belonging and employability: four case studies

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Abstract

Employability is not just about focusing on building the students’ workplace experience but about developing their social and cultural capital through learning. In higher education, the selected pedagogies are central to that development (Pegg, 2012). Thoughtful curricular design which maximises student engagement and adopts pedagogies for career and employability learning can help to prepare students for the reality of the workplace. These pedagogies with social connection at their heart can enhance student wellbeing and their perceived sense of belonging to their course and the wider world. This can thus build more confident, reflective, and collaborative graduates who should ultimately be more employable (Rowe, Jackson and Fleming, 2023).

This paper uses a qualitative approach to outline four course-based case study examples of pedagogies that strengthen the behaviours and skills that enhance students’ employability. The curricular and pedagogic practices of each are examined, and
significant themes from each are then synthesised. Together they demonstrate how thoughtful course design and inclusive, integrated, contextualised pedagogic approaches support the development of students’ employability learning and graduate skills (Healy, 2023).

The common themes from the case studies focused on self-directed, student-centred, authentic learning which encouraged students to i) work with industry and communities to build early professional networks, ii) engage in connected learning where the curriculum and its supporting activities and pedagogy facilitate collaborative learning, and iii) develop confidence, a sense of belonging and professional identities through using these inclusive, collaborative learning approaches.

In addition, six practical pedagogic principles are identified for course teams to utilise. These include i) focus on inclusive practice, ii) building students’ professional identity, iii) developing students’ belonging, iv) deep critical thinking, v) the demystification of the workplace through the activities selected, and vi) students leading their own learning.

This paper integrates a series of reflective questions (mapped to each principle) for educational developers to consider as they design future learning activities which foster graduate skills during career and employability learning.

**Keywords:** employability; belonging; curriculum; pedagogy.

**Introduction**

Employability is a key concept in higher education and is regarded as central to it (Mawson and Haworth, 2018). The role of HEIs goes beyond ensuring that students are knowledgeable in an academic discipline to ensuring that they are prepared for the labour market (Yorke, 2006). Graduate employment rate is often used to assess the quality of university provision but, despite that, employability and employment are two different concepts. Universities prioritise employability as a primary purpose of personal and public investment into higher education and target graduate employability in their teaching, learning, assessment, and student support strategies. It remains a central concern for the
HE sector, but such graduate employability building still lacks coherent, robust pedagogical foundations (Healy, 2023).

However, it is graduate outcomes, i.e., employment rates, that are important to the government and the stakeholders in higher education (assessed through HESA’s graduate outcome survey) and feature prominently in the Teaching Excellence Framework (TEF). The Teaching Excellence Framework (OfS, 2022) uses progression of graduates into ‘highly skilled’ jobs as the marker of a high-quality tertiary education and universities work to enhance graduate employability through developing their students’ employability skills to prepare them for the challenges of gaining and maintaining graduate employment. Some have argued that solely using employment rate statistics and graduate salaries as a key indicator for employability will encourage the practice of putting employers’ needs above knowledge creation and applied meaningful learning for all students whatever their backgrounds (Cheng et al., 2022).

Socioeconomically disadvantaged students who may have reduced social and cultural capital still have a different experience accessing and transitioning into higher education and their experiences once there can be poor, with a reduced chance of gaining the skills to achieve a graduate job (Thiele et al., 2017; OfS, 2021; Reay 2021; Allen et al., 2022). To complicate this picture further, the labour market’s needs associated with graduate job roles change constantly in response to their fast moving, varied, and distributed nature. To address this, Bridgstock (2019) describes a new phase in the development of students’ employability which rejects the notion of building ‘graduate skills’ in favour of a more flexible, applied, and responsive approach based on the involvement of external stakeholders and alumni and an applied and ‘connected’ approach to developing high-level thinking skills.

This paper explores four ‘employability’ case studies from different subject areas which exemplify pedagogical interventions for all students, whatever their social or cultural backgrounds. These interventions support and reflect a more inclusive, applied, social, connected context for building employability and graduate skills.
Context

Pegg et al. (2012) asserted that integrating effective learning with building students’ employability skills, especially in ways which address diverse individual needs, remains the key challenge for the sector. Tomlinson and Jackson’s (2021) study sees universities as enablers, providing students with cultural and social capital which plays a crucial role in supporting students to enter and progress in the job market. This approach mandates the need for pedagogies which facilitate students’ knowledge sharing as they work together, as well as offering sufficient student autonomy to provide for and value individual motivations and abilities (Patton and McMahon, 2006). Bridgstock (2019) also outlines how employability learning is best conceived, not as a bounded set of skills, but as a constantly fluid set of developments shifting across the pattern of education and careers and focusing on a dynamic shared understanding between stakeholders (i.e., between the universities, students, alumni, and industry). Yorke considers it inappropriate to assume that students are highly employable on the basis of curricular provision alone, stating ‘it may be a good harbinger, but it is not an assurance of employability’ (2006, p.20). He feels employability entirely derives from the ways in which the student learns from their experiences. Healy’s latest (2023) paper emphasises his vision for career and employability learning and curricula which focuses on strengthening a developmental, psychosocial process which is contextualised and dialogical with the student.

In addition, pedagogies for employability embedded in a course which maximise student engagement and develop the breadth of workplace activities, have the potential to enhance students’ sense of belonging, personally, professionally and with each other (Jackson and Wilton, 2016; Rowe, Jackson and Fleming, 2023). For further context, professional identities can be strengthened through the teaching activities (Tomlinson and Jackson, 2021). Student-led active learning to enhance employability can build critical thinking skills (Kelly et al., 2019) and may help demystify the workplace thus reducing anticipatory fear and improving confidence (Maina, Guardia and Fernández-Ferrer, 2021).

Career development is also recognised as an integral element of students’ mental wellness (Blustein et al., 2016; Tang et al., 2021). The experiences of students in the pandemic as reflected in WonkHE-Pearson’s (2022) recent large survey shows how the lack of student community and belonging can have a negative effect on student wellbeing. This survey of 5,233 students in UK universities indicated that only 55% of students
reported feeling a sense of community with their cohort, and this fell to 18% for those who say they ‘don’t belong’. Yet, ‘connection with own course’ was felt much more strongly than to their ‘own university’. ‘Course’ played the second most significant role in how settled students feel (56%), followed by ‘connecting with others on the course’ (55%) and ‘making friends’ (52%). Students who reported good mental health and a strong sense of belonging want more learning which supports the development of more friendships. If students have a strong sense of belonging to their course, this may also enhance their retention, progression, and satisfaction (Thomas, 2012).

There are several domains of ‘belonging’ for students. We use Ahn and Davis’ framework as our model in this paper (Ahn and Davis, 2020). Their ‘academic’ domain, a core component of ‘belonging’ is useful as it simply frames how students perceive they belong in their classroom and to their course and how they relate to the teaching of the curriculum. Academic teaching staff and educational developers can most readily influence the academic domain. Montacute, Holt-White and Gent (2021) explore student belonging through the lens of inclusion and report on student participation in life at university and the opportunities universities offer. They describe the lack of inclusion through markedly reduced participation in placements, enrichment activities, extracurricular activities, and internships for working class students. They emphasise the importance of the learning gained from the course and the necessity of totally inclusive curricular activities, centred around the course (the core academic domain to which all enrolled students have access). These embedded curricular activities should be open to all to accelerate and support the levelling up of graduate employability and augment students’ social and cultural capital development (Montacute, Holt-White and Gent, 2021).

We regularly remind students that employability is fundamentally about learning rather than just accumulating a list of experiences and attributes which might enhance their career prospects. With new technologies and working practices students’ learning in higher education has never been more important. At our university, pedagogical principles are threaded through the curriculum and course design guidance (Leeds Beckett University, 2022; Leeds Beckett University, 2023a) and are at the heart of our efforts to determine how we support students to prepare them for graduate employment. We use transformative learning experiences (activities in which the learner applies classroom learning to everyday life experiences) to expand and enrich their perception. Mezirow
(2003) defined this transformative learning as the process whereby adult learners critically examine their beliefs, values, and assumptions in light of acquiring new knowledge and beginning a slow process of personal and/or social change. In parallel, we use pedagogies that support wellbeing which is so necessary in the fast-changing digital world (Kift, Nelson and Clarke, 2010; Hughes, 2022; Potgieter, Coetzee and Ferreira, 2023). These activities focus on enhancing students’ social connections, and confidence, which are, in themselves, useful attributes for their future lives, and for success in the workplace.

Methods

We adopted an interpretive approach for this project with a focus on qualitative inquiry (Cresswell, 2007).

A series of internal staff development fora were created to provide a research-informed opportunity for practice sharing and educational development. These fora are part of our wider institutional approach to practice sharing and educational development for academic and professional service staff. The Centre for Learning and Teaching (CLT) shares best practice through these events, and they are themed to components of our own institutional Learning Pathway (Pickford, 2018) and the Education Strategy priorities (Leeds Beckett University, 2021) which relate to improving continuation, satisfaction and, like the rest of the sector, progression into graduate jobs.

In 2022, academic colleagues were invited, via our internal online staff networks, to submit best practice case studies for an online half day forum which exemplified innovative and effective models for teaching employability skills for students. The authors, who presented their practice at the forum, came from four subject disciplines: Sport and Health Sciences, Childhood Studies, Cyber Security, and Broadcast Media. Authors submitted long form case studies on an agreed template which encouraged examination of the following key areas: i) form of project: its duration, design, and purpose, ii) the size of student group at each academic level, iii) how it was assessed, iv) how it was taught, v) underpinning theory, vi) student views, experiences, and outcomes for employability, and vii) reflections on its future development, challenges, and successes.
Discussion at the event itself and afterwards (by the four case study authors and forum facilitators) revealed that each case study, though initially presented individually about specific course practice, appeared to show commonalities with the other three case studies, particularly in terms of the pedagogical design principles, the outcomes, their impact, implementation challenges, and applications.

It was at this point, that we considered retrospectively interrogating these perceived commonalities by qualitatively analysing each of the case studies separately and then in parallel, to explore evidence of any practice similarities. To explore the issues, we established a research project group of project facilitators and case study authors. The project was approved by our University Ethics committee.

The process

The iterative discussion and analysis process had several stages outlined below:

- The research team all contributed to the construction of a template with agreed headings for a detailed consistent written exposition of each case study. These headings emerged from a recorded, shared group consensus about the information required to make meaningful connections between the studies.
- The two independent academic facilitators (i.e., not the case study authors) then read each case study separately and thematically analysed the content of text of each of the case studies to identify any key themes deductively (Willig, 2003). The final identified themes had to relate to the teaching approaches which united key elements of all the case studies. Each facilitator then shared their own emergent themes with the other and together generated a list of agreed themes.
- These emergent themes were then shared and validated via the whole group at two recorded meetings and the dialogue in the meeting transcripts was used to generate and then triangulate the emergent commonalities. Multiple readings, member checking, group comparison, and consensus was used to hone and triangulate the final themes as part of the discussion (Tracy, 2010).
The case studies all offered approaches and activities which demonstrated four core common themes:

- Opportunities for self-directed, student-centred, authentic learning.
- Opportunities for students to work with industry and in communities to build their early professional networks.
- Opportunities for students to engage in connected learning where the curriculum and its supporting activities and pedagogy facilitate collaborative learning skill development.
- Learning opportunities which develop confidence, a sense of belonging, and professional identities, for example, inclusive collaborative learning approaches.

The project group discussed the agreed themes (above), then focused on refining their thinking about the emergent underpinning pedagogic principles, challenges, and pleasures of teaching employability skills.

As part of this analytical process, which took place over five months, the working group employed a reflexive approach, i.e., considering themselves as inserted into the social field itself (Bourdieu, 1986) and, as such, considered their own positions and perspectives in relation to the teaching and their chosen approach with their students. Research reflexivity (Tracy, 2010; Olmos-Vega et al., 2023) was actively considered at each stage in relation to the emergent results and discussion. The case study authors, in particular, were mindful of their own stance in relation to their chosen paradigms. We used active reflexive practices to align decisions at all stages of the research. We explored the need to distance themselves from both the discussion of their own case study and the expression of ‘vested interests’ through wanting their curricular ideas and academic practice to be showcased.

**The case studies**

Each case study is summarised in Appendix 1. The full case studies in the original templates are also available as a learning resource for academic colleagues (Leeds Beckett University, 2023b).
Findings

Features common to all four case studies: a summary of the case studies

A summary of the four case studies is in Table 1 (below). More detail of each case study can be seen in the full long form case studies, which are now used for practice sharing and as a learning resource (Leeds Beckett University, 2023b).

Table 1. Summary of four case studies.

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<th>1</th>
<th>2</th>
<th>3</th>
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<tbody>
<tr>
<td><strong>Subject</strong></td>
<td>Cyber Security</td>
<td>Creative Technologies</td>
<td>Sport and Health Sciences</td>
<td>Childhood Studies</td>
</tr>
<tr>
<td><strong>Cohort size</strong></td>
<td>200 Levels 4, 5, and 6</td>
<td>100 Level 6</td>
<td>330 (4 courses) Level 5</td>
<td>320 Levels 4, 5, and 6</td>
</tr>
<tr>
<td><strong>Number of students and academic level</strong></td>
<td>2 years</td>
<td>7 years</td>
<td>3 years</td>
<td>4 years</td>
</tr>
<tr>
<td><strong>Broad Aim</strong></td>
<td>Enhance students' experience of existing modules.</td>
<td>Reward 'professionalism' and engagement with external networks.</td>
<td>Develop students' capacity and commitment to lead development.</td>
<td>Enhancing the value of students' work with and for children and families.</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Provide a continuum of learning towards 'industry standard' assessment performance.</td>
<td>Develop skills not found in a library, extend personal contacts and highlight readiness for work.</td>
<td>Provide more inclusive and flexible workplace learning opportunities.</td>
<td>Developing professional identities and sense of belonging.</td>
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### Assessment Types

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<tr>
<td><strong>Assessment Types</strong></td>
<td>Team projects, professional/real world reports and engagement with social network via Discord platform.</td>
<td>Portfolio. Report or Podcast.</td>
<td>E portfolio. Self-recorded interview.</td>
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### Student feedback and outcomes

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<tr>
<td><strong>Student feedback and outcomes</strong></td>
<td>Higher quality and more authentic assessment performance, more enjoyable learning, social platform continued to be used outside of ‘module’ and shared across all cohorts.</td>
<td>Growth of professional contacts and of external influence. Empowering experience.</td>
<td>Higher module grades, improved progression (even during pandemic). Students produce more creative work. Positive qualitative feedback received in focus groups and module evaluation.</td>
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</table>

Fundamental aspects of design which all the case studies have in common involved:

- Students working with industry or communities building new professional networks.
- Students undergoing connected learning where the curriculum and its supporting meaningful and authentic activities, platforms, and pedagogy supports the building
of new connections, i.e., between students and professionals, the students themselves, and links via various teams.

- Curricular activities, through the pedagogy, which have the effect of developing the building blocks of students’ emergent professional identities.

**Discussion of thematic findings**

We explicitly articulated during the discursive analytical process whether we felt any of the emergent commonalities and pedagogic themes were unexpected or surprising.

However, we recognised slowly together, as we explored the transcripts and discussed the findings, that tightly applied authentic learning can influence the beginnings of professional identity and there is a strong interrelationship between the two. Likewise, how collaboration, social learning, and connection generated through the pedagogies (and applied through networks in the workplace, the placement, and/or the campus) adopted can foster both self and professional identity and a strong sense of belonging. The sense of belonging generated by the learning activities described in the case studies unites the thematic commonalities and is represented in Figure 1. These commonalities have been reproduced in Figure 1 showing how a sense of belonging through the networks, placements, workplaces, curricular activities, and teaching can be fostered as the centre of all this activity.
Six key pedagogic principles were then generated by the group, which underpinned all the themed commonalities. These are outlined below.

We also include a series of reflective questions linked to each pedagogic principle. These questions can be used by educational developers and course designers when interrogating the suitability and value of their modules and curricular design. They reflect a specific focus on issues relating to building employability issues for students on graduation.

The questions could act as a resource to encourage teachers to reflect on the adoption of pedagogies that support the building of their students’ employability/life skills, professional identities, and behaviours.

1. Inclusive pedagogic practice
We must choose pedagogies that enable all students to: remain healthy while studying, enjoy their learning, realise their potential for study, and emerge equipped with the skills and learning techniques to manage a successful graduate career.
Teaching at universities has needed to become more inclusive to serve the greater diversity of students and we have a responsibility to choose pedagogies that support this and enhance all students’ sense of belonging through the types of inclusive pedagogies chosen. Wellbeing has moved from being regarded as a curricular ‘other’ to now being central to university teaching (Hughes et al., 2018). Choosing pedagogic approaches and embedding them in all modules, so they are inclusive and accessible to all, encourages more students from disadvantaged groups and minorities to feel included and have their learning needs recognised and supported. Pedagogic approaches that foster inclusion, support at transitions (Kift, Nelson and Clarke, 2010), and compassionate transformational pedagogies (Hughes, 2022) for wellbeing and belonging are evident in all our case studies. The wide range of students’ backgrounds and possible career paths and their contexts need to be explicitly considered and careers and employability learning needs to be integrated, relevant, and contextual (Healy, 2023).

In Case Study 1, inclusive practice was demonstrated by the diverse team members having to understand, process, and act upon different team members views and differences of opinion relating to the technical solutions and group outcome. The platform used in Case Study 1 offered equal, in-curriculum access to shared learning. Case Study 2 shows how all students are supported to make contacts in broadcasting and media workplaces and are actively praised when they do. Students are managed carefully by the course team, and no one is ‘left behind’. Case Study 3, embedded for Level 5 students, demonstrates a wide range of inclusive placement opportunities, flexible choice, tailored, self-directed assessment involving a portfolio, and oral self-recorded reflective interviews. Likewise, Case Study 4 offers diverse flexible Legacy Projects to all levels, offering a wide choice for students to follow their own interests and build workplace skills at their own pace.

Reflective questions for educational developers:

- Are your course documents and assessment specifications written simply and inclusively?
- Are your student projects and activities designed to be threaded through, integrated, and developed up through the academic levels and not just hived off, siloed, and ‘put’ into an ‘employability week’?
• Have you considered the diversity of the students and the range of career pathways they may wish to enter on graduation?
• Are you ensuring that you are getting inputs into the curriculum from multiple industries, sectors, and organisations that help to provide a more diverse, contextualised, and representative view, reflecting graduate migration trends and the non-linearity of the graduate labour market?

2. Building professional identities and employability skills

Professional life does not always go smoothly. Uncertainty can threaten the professional identity of new graduates in new jobs. There is a legitimate place in the curriculum for all students, whatever their backgrounds, (Thiele et al., 2017) to develop preparatory strategies to deal with these difficult times. All our case studies have robust structures that offer space for safe discussion of situations that are challenging. This builds students’ interpersonal and higher order thinking and problem-solving skills which contributes to the acquisition of a personal and professional identity (Tomlinson and Jackson, 2021).

In Case Study 1 students found identity within their roles as they took collective ownership of the reports, management tasks, and cross-examination performance. Students worked in small groups, dealt with challenges, and developed an understanding of the technical and professional environment in the workplace. They were assessed on their project management which involved how they dealt with peer and professional feedback. In Case Study 2 students demonstrated accelerated professional growth as they developed their networking skills and an understanding of issues relating to the speed of workplace change, resilience, and adaptability. Case Study 3 supports students to find a 120-hour placement. As this occurs, students have setbacks, need to find solutions, and build resilience and confidence in approaching others: in essence, professional skill building. Similarly, Case Study 4 offers specialist opportunities for students to build professional skills and learn to cope with unpredictable outcomes.

Reflective questions for educational developers:

• Are the skills built into course activities (technical, interpersonal, and professional) explicit to students, so they know what they are learning?
• Have you designed your activities and the assessments to maximise the learning of skills that will prepare them for the workplace as a graduate and wider life more generally i.e., higher-level skills like robust critical thinking, critical reflection, synthesis, and organisation?
• Do you encourage students to explore subject interests beyond the classroom, including related volunteering, work experience opportunities, and engaged learning opportunities?
• Have you introduced students to experience-based reflection to help them to make connections between, and draw conclusions from, their experiences to inform future thinking? Have you encouraged them to specifically link this reflection to life and career planning?

3. Building a sense of belonging
The case study authors were positive about teaching large numbers of students, but recognised course identity and students’ sense of belonging could be diluted in a larger cohort. Pedagogic approaches to foster connection and collaboration and reduce the sense of student anonymity need to be robust (Hughes, 2022; WonkHE-Pearson, 2022). For example, in Case Study 1, the group were offered a safe space for positive gaming experiences to be transferred to their learning. The enhanced social connections on the platform with staff and students offered enhanced interaction and connection. Students began to feel more comfortable as they felt more aligned to the learning community generated by the project, and it felt safe to ask questions. In Case Study 2, the supported professional networking, shadowing, socialising and workplace experience made them feel more familiar with broadcast industry and its infrastructure. Case Studies 3 and 4 also emphasise the importance of the course family, collaborative working, and the necessity of a safe space for the facilitation of deep student reflection and discussion. As reflected in the literature (Kift, Nelson and Clarke, 2010; Hughes 2022), this underpins pedagogies for wellbeing that foster connection, collaboration, and engagement, then increases confidence in students’ course communities which thus build attributes, character, and the social and cultural capital to make them more employable as new graduates (Kalfa, 2015).

Reflective questions for educational developers:
• Do you design your activities to be intentionally collaborative and thus offer enhanced opportunities for belonging, building connections, confidence building, social links and friendship making?
• Do you explicitly articulate how collaboration is a key graduate skill and where it can be used to strengthen activities in the workplace?

4. Building critical thinking
Case Studies 1 and 2 give opportunities (noted through their learning outcomes) through the authentic technical problems posed for students to ‘dig deep’, be enquiring, and seek and analyse information on background context and optimal solutions. In all case studies, the students critically evaluated arguments and abstract concepts and framed appropriate questions to achieve a solution, or identify a range of solutions, to problems. Case Studies 3 and 4 offer project opportunities for extra research and experience, requiring critical thinking and problem solving in authentic professional situations where issues should not be taken at face value but explored in depth to find reasoned, evidence-based, professional solutions.

Reflective questions for educational developers:

• Do you embed tasks that allow students to problem solve, be curious and do additional information seeking and research to generate a fully informed picture?
• Are these applied and embedded to be relevant to authentic activities students will face on graduation as part of the workplace?

5. Demystifying the workplace through the pedagogies selected
In Case Study 1 students began to develop expertise in the technology. Taking peer feedback on specific technical issues and having to solve technical problems and answer questions from the qualified technical professionals in the workplace enhanced their confidence and reduced their anticipatory fear about what they might face in the professional environment. In Case Study 2, not only did they grow to understand the speed of technological and industry developments but hearing the experiences of the inspiring graduate alumni in their new roles and how they had ‘adapted’ to a career in
broadcasting helped to acculturate students to the future and see a clearer career path. Case Study 3 and its associated placement allows for a growing feeling of familiarity and belonging in a workplace setting and with the environmental demands of the profession, its specific language, and its concomitant professional expectations. The skills and knowledge that emerged in the reflective element of the assessment for Case Study 4 revealed improved understanding of the workplace and, through this enhanced knowledge, a reduction in students’ fears.

Reflective questions for educational developers:

- Do you use your recent successful alumni to act as role models and invite them back to talk to your current students about their career paths and experiences?
- Are you enabling students to understand where and how the skills and subject knowledge they’re developing could be applied in a professional context by setting professional tasks and industry authentic assessments?

6. Students leading their own learning.
This was enhanced by pedagogies which encouraged collaborative working, embedded flexibility, options for choice and individual decision making. For example, in Case Study 1, students used their own initiative to use the platform out of term time to extend their learning and knowledge and communicate with other students and alumni. In Case Study 2, they are assessed on a portfolio which allows choice and control over what and how they present. They have choice and control over how they work and learn. They can choose to contact careers advisors and academic staff and collaborate to share proposed ideas with student peers. The task-related activities in Case Studies 3 and 4 provide intrinsic motivation for students to maximise their learning, become self-managing, solve individual problems, and reflect on investing in their future selves and careers.

Reflective questions for educational developers:

- Have you intentionally designed your work so students can be active, flexible, and self-directed around how they engage with the learning?
Can your students learn at their own pace whilst being given opportunities to be mindful of the impact this may have on others in a group?

Do you explicitly discuss how self-motivation, independent learning, and self-reliance are important life and graduate employability skills and encourage them to reflect on how they might best develop these skills for themselves?

**Reflecting on practicalities and challenges for educational development and future work**

The case study authors reflected on some of the pedagogic and educational issues related to this work.

Practicalities:

- **Student numbers:** the course cohorts in these case studies are large (over 100 per year cohort). All can be scaled up to different disciplines and are suitable for even larger cohorts if colleagues take heed of the challenges noted around leadership and resourcing.

- **Module organisation:** the module leader should be mindful of the familiar challenges relating to work of this type, for example, as we noted, staff resource, planning, consistent seamless communication with teaching colleagues and students, and adaptability of different pedagogies to in-person and online learning environments.

- **Inclusive practice:** robust consideration of inclusivity in relation to the experiences, participation, and employment needs of students from disadvantaged and minority groups and the cultivation of their own sense of belonging should be actively considered (Hussain and Jones, 2021).

- **Critical thinking:** We reflected on the need to avoid a narrow conception of critical thinking and that these case studies give students the confidence to challenge the status quo and give them the skills to take things apart. We discussed that, as teachers, we must not be reluctant to let them run with new ideas, take managed risks and opportunities, and reflect about these as part of their development and growth.
- A well-planned curricular model: an intentionally scaffolded, integrated curriculum model which spirals through the levels can help to support depth and development and was part of the infrastructure that bound many of these case studies.

- These case studies were all embedded in modules where there was a clear module philosophy in the documentation, explicitly aligned to course aims and repeatedly shared by the module team with their students. The activities and assessments were explicitly designed to maximise student learning and had a solid foundation. The longevity of three of the four case studies were over three years and the core ideas had been successfully modified and enhanced over time.

- Building student confidence: activities that involve the students’ participation and, through the pedagogy, offer opportunities for connection, mutual support, and autonomous learning also have a benefit for students’ mental health, enjoyment of learning, and confidence building (WonkHE-Pearson, 2022; Potgieter, Coetzee and Ferreira, 2023). Students’ confidence equips them with resources to cope with additional work demands and adapt to fast moving environments. Building this sense of belonging through the students’ learning is at its core and exemplified through our case studies.

- In addition, the case study authors agreed that more qualitative and quantitative evaluation is needed particularly in relation to analysis of student outcomes and the longer-term benefits of these case studies beyond graduation. Robust evaluation approaches have been shown to be a challenge in pedagogic research (Austen and Jones-Devitt, 2023) where ascribing causality without identical control groups or robust data pre/post intervention data sets is difficult (Jones-Devitt and Austen, 2021.) The case study authors specifically wished to seek similar student groups in different subject areas where outcomes could be compared which would thus enable more indication of correlation between their pedagogical initiatives and improved student outcomes. This paper contributes to the field of belonging, social connection, and employability in terms of its illustrative case study applications. The authors still wish to collate for further study, more graduate qualitative data on inclusion and belonging and evaluate whether these curricular embedded activities were specifically successful in building their students’ employability skills and their confidence and generating a reduction in workplace anticipatory fear.
The challenges

The challenges for the course teams were similar and mainly focused on the challenges of working with larger student cohorts (all had over 100 students per cohort). While these case studies could be adapted and applied in other subject areas and courses, colleagues should be mindful of the challenges.

Where there are larger student groups, it was essential that staff resources were sufficient to be responsive to students. Student satisfaction (measured through the NSS and module evaluation) was better when the larger cohorts had a better staff/student ratio and tight coordinated leadership and communication. Case study authors had to work with academic team members particularly in relation to their perception of teaching ‘pure’ disciplinary employability skills. Some colleagues felt their specialist skill teaching was being diluted by using embedded activities that were less didactic and more focussed on problem solving. Using more intense problem-based teaching approaches to build student curiosity and research skills went some way to resolve this and helped the teachers move away from a perception that they had to be an expert didact and should be supporting new ways of deeper, applied, and transformational learning in students (Loyens et al., 2015). In addition, staff clarity of understanding in relation to the marking of the applied and synoptic assessments was important.

The coordination and administration of larger staff pools needed to be well planned, coherent, and consistent for the implementation of the course activities to be successful. Clarity, shared expectations, and ownership from the teaching staff in relation to the teaching approaches were key to success.

Conclusion

The illustrative case studies show that building employability skills can be valuable, educational, and meaningful for students. All the case studies, which had all sustained well in their original disciplines, were subsequently rolled out to courses in new disciplines with different sized cohorts.

Careful consideration of the case studies’ pedagogic approaches indicates that collectively they all show different ways to facilitate students’ learning in a meaningful way. This was
demonstrated by links with industry and community to build new professional connections which, in turn, helps to build students’ professional identities and, over time, may underpin their increasing social and cultural capital. This meaningful work is real-world, authentic learning happening in genuine professional contexts, but the curriculum design itself and the teaching of it supports the networking and collaborative skill building. The connected learning that takes place helps students understand the importance of fostering relationships throughout university and beyond, to their future employment and lives ahead. Participating students appear to build higher level thinking and increase their sense of professional belonging and connection. If activities are authentic, integrated, and applied, then technical and organisational skills are developed in parallel too. This approach offers other benefits and outcomes too: increased confidence, improved professional identity, and an enhanced sense of belonging to the class, the university, and, through links forged via the activities, with relevant industry/community contacts.

In conclusion, professional identities and associated skills have to keep pace with dynamic, distributed, and diversified labour markets. We therefore need to move beyond the dominant individual skills approach (i.e., employability skills and graduate attributes) that permeates higher education to keep up with the pronounced pace of change of employers’ broader requirements. As we move towards a qualitatively new phase of employment that Bridgstock (2019) terms ‘Graduate Employability 2.0’, our six pedagogic principles, outlined in our findings, for useful authentic employability learning go some way to contribute to this body of knowledge. The development of artificial intelligence (AI) is also impacting the HE sector. It has the potential to change the nature of work in the twenty-first century and the learning offered by the pedagogies we outline in this paper could potentially contribute to the continuing relevance and application of HE learning.

Employability should be front and centre of our course curriculum and content. Those working in higher education have a duty, through teaching and thoughtful curricular design, to support and prepare all students to be successful in a wide range of post-university options, helping them to be successful in managing their careers in an ever-changing society and its world of work.
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References


New Directions in the Teaching of Physical Sciences, 0(14).
https://doi.org/10.29311/ndtps.v0i14.3048.

https://doi.org/10.5204/intjfyhe.v1i1.13.


Appendix 1: summary of the four case studies

Case study 1: Cyber Security
Fostering personal, professional and course identity in Cyber Security delivery.

This aimed to enhance the delivery of current modules and, ultimately, the student experience. The study focused on the use of Discord as the primary communication platform for Cyber Security students. The platform, originally designed as a gaming platform, became an associative learning space where students felt comfortable to ask questions, provide opinions, and make mistakes without feeling intimidated. Accessible on- and off-campus, including on mobile phones, Discord allowed students to continue learning from home and fostered social connections and course bonds during the Covid-19 pandemic restrictions when campuses were closed. It was used in both the Level 5 and Level 6 modules outlined below.

At Level 5, the Team Project module was designed to promote a sense of course, personal, and professional identity. Teams of students produced industry-standard penetration testing reports, which were used in a simulated court case and marked on project management and report quality. The cross-examination by a real barrister reinforced students' professional identity and helped students realise they were experts in their field.

The Production Project module at Level 6 was also designed to provide a realistic professional context for individual projects. Students were organised into small expert groups and went through regular planning, progress, and review meetings. This allowed students to rely on peer feedback and embrace their role as technical experts/reviewers, reinforcing their sense of course and professional identity. The clear focus on why certain actions were taken and their benefit to students helped increase motivation and a sense of belonging. These findings are consistent with WonkHE-Pearson’s (2022) research, which found that students who feel a sense of belonging to their course and institution have better academic outcomes and are more likely to persist to graduation.

In conclusion, the case study highlights the importance of communication platforms like Discord and hands-on modules in enhancing the student experience and promoting identity, belonging, and professional development in Cyber Security students. The
department intends to extend the use of Discord to other courses and assess its impact on student outcomes. Additionally, the staff aim to increase hands-on and project-based learning opportunities, including real-world scenarios and simulations, to better equip students for careers in the field.

**Case Study 2: Creative Technologies**

Building work readiness and professionalism by networking, problem solving, and building belonging.

This case study is based on a seven-year project with Creative Technologies students which is designed to foster belonging, networking, and problem solving as students transition to a broadcast industry workplace. This module was created to improve employability for final year students and has been running for around seven years. Students are supported to make meaningful personal contacts with those working in industry and to develop their readiness for work. This is achieved by developing and rewarding professionalism, requiring students to approach the people they would like to work with through work shadowing and informal ‘interviews’ about industrial practice which lead to rapid career development and offers of employment. The course team can use their own networks to smooth introductions where needed and students support one another with ideas for progress early in the module, strengthening their sense of belonging. No student is ‘left behind’.

The assessment is in two parts: portfolio presentation to a panel of academics and careers team members followed by a report/podcast presentation for the second component of assessment. The use of careers staff and portfolio presentation allows students control of what and how they present, while enabling them to engage face-to-face with key staff in the university who can continue to support them post-graduation and allowing for their public persona to be professionalised before progressing into industry. The second component promotes critical thinking as well as confidence in growing networks and contacting employers/future peers.

Students are supported in both components to help them reflect upon their individual preferences and strengths. They have contact with academics and careers staff on the
panel before their presentation of a portfolio. This puts them at ease and introduces the idea that personal relationships can be powerful and positive. A programme of guest lectures offers informal introductions to professionals including graduates of the course, whose stories of how they ‘got in and got on’ are personally empowering for students and emphasise that the course ‘family’ is worth belonging to as a short- and long-term network. The module receives very positive reviews from students, employers, careers staff and graduates. Graduate guest lecturers refer to it as empowering and influential for them and this perpetuates the potential for a positive/virtuous cycle of growing contacts/influence.

**Case Study 3: Sport and Health Sciences**

Building career identity among large groups: lessons learned from applied experience.

This core Employability module was embedded in four different Sports courses and delivered to an annual cohort of 330 Level 5 students by an interdisciplinary team (n=17) each year between 2019-2022. The module aimed to develop students as reflective, self-managing practitioners who are committed to their own development and growth (Lester and Costley, 2010). Student peer collaboration and discussion in small groups, in person sessions, and online Blackboard discussion were core to this module. Learning emerged from the focus on their personal growth and career interests provided from the experiential learning of their chosen development opportunity.

The 120 hours of development opportunities were tailored to each student’s needs and career interests and therefore flexible in terms of content and mode of delivery. Support provided within the module ensured that students engaged in relevant development opportunities matching their interests and needs, while feeling confident to embrace new developmental challenges. Some examples include placements in sport or health settings shadowing practitioners, interviews with professionals working in a field of interest (for example, medical staff, teachers, academics), engagement in a journal club, development of a professional profile in social media. Modes of teaching comprised both one-to-one and group sessions delivered in different formats (remote to face-to-face or hybrid).

Feedback received from students through focus groups and self-report measures highlight the importance of the module for personal and professional growth and valued the flexible
and collaborative teaching approaches used. Students particularly enjoyed the autonomy and support offered, the opportunity to consider their own interests, and the prospect of new career horizons beyond their course, while enlarging networks. From a course perspective, the module has encouraged a sense of community towards finding meaningful development opportunities for each other while fostering collaboration and connection among peers and staff. This goal was reinforced through different pedagogical activities such as deep reflection exercises, sharing of best practices, and challenges and mentoring opportunities. Despite the inherent challenges associated with the leadership and management of such a large module, outcomes were very positively reflected in students’ grades and qualitative feedback.

Moving forward, researchers should dedicate further attention to the concept of inclusive and meaningful learning in higher education by valuing students’ experiences and contexts and offering equal opportunities for development.

**Case Study 4: Childhood Studies**

Enhancing employability and student belonging through the Legacy Projects.

This case study describes the employability-related ‘Legacy Projects’, tailored towards 270 undergraduate students studying on the interdisciplinary BA(Hons) Childhood Studies degree. A core 40-credit employment module was embedded into all levels of the course. The main impactful outcome was that this design led to 56% of Level 6 students securing highly skilled employment or postgraduate training by graduation.

Students chose a workplace and solved an authentic problem. By completing a Legacy Project, the students’ broad aim was to add value in their work with or for children, young people, or families. Examples included volunteering in a food bank, working as a Childline counsellor, working as a playworker in a safe house, and designing a scavenger hunt on a neonatal ward to help young siblings feel less scared about visiting the hospital. Diverse work experiences coupled with structured reflection developed assets in terms of career-specific skills and attitudes.
Legacy Projects were assessed via two methods at all levels: a portfolio of evidence and a presentation. Both the portfolio of evidence and presentation had a reflective component where students share their experiences of designing and implementing a Legacy Project although the assessments are differentiated via the learning outcomes for each module and the set tasks implemented within each assessment. At Level 4, reflection took the form of reflecting on the skills and qualities developed through their work experience. They also begin to draw links between what they have seen in the ‘real world’ to their theoretical learning from their other modules. At Level 5, students begin to report on specific facets which link to the types of topics they would typically be asked at a job interview, i.e., safeguarding and child protection. By Level 6, students’ sense of belonging to a professional field tends to be reflected in their use of professional language.

The projects prepared students to later present a robust professional identity to employers and post-graduate training providers. Students applied successfully for a diverse range of postgraduate career destinations including teaching (all ages and stages), nursing, occupational therapy, speech therapy, social work, and the police.

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